



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada
Tel (613) 632-5200
Fax 613 632-5246

RBE703A95-0520-01-1
Job Sheet 189805



Part No: RBE703A95-0520-01-1

Job Qty: ~~10 pcs~~
12 pcs

Part Name: Quill



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/30/19

Job Tracking No:

Due Date: 3/8/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG RBE703A95-0520-01-1 REV:4 IPP REV:A 18.01.17 NEW ISSUE RQ VERIFIED BY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter / Supplier Lead Time	Sign-off
					Setup Hrs	Run Hrs		
140	SL-154 - 1	10 pcs	3/8/19	3/8/19	0.00	1.67	SL-154 - 1	19/02/03
150	QC 2	10 pcs	3/8/19	3/8/19	0.00	0.83	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	19/02/03
							QC 2 - 35	
							QC 2 - 38	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 54	
							QC 2 - 56	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S150361



Part: RBE703A95-0520-01-1

Job No: 189805

Serial No/Batch: S150361

Revision: 4

Inspector:

Exp Date:

Instructions:

Date: 02/20/19

160 QC 8

10 pcs

3/8/19

0.00 0.00

QC 8 - 12

QC 8 - 14

QC 8 - 17

QC 8 - 20

QC 8 - 25

QC 8 - 3

QC 8 - 32

QC 8 - 33

QC 8 - 35

QC 8 - 38

QC 8 - 39

QC 8 - 4

QC 8 - 44

QC 8 - 45

QC 8 - 49

QC 8 - 58

QC 8 - 8

QC 8 - 9

QC 8 - 68

QC 8 - 67

QC 8 - 1 (A)

D. 19-02-09

190 Outsource - 4 - Anodize

10 pcs

3/8/19

GRO002-VC

10

CT 19-02-11

200 Packaging 2-1 - Receive - B4B

10 pcs

3/8/19

0.00 0.00

Packaging 2 - 1 - B4B

Packaging 2 - 2 - B4B

Packaging 2 - 3 - B4B

Packaging 2 - 5 - B4B

Packaging 2 - 4 - B4B

Packaging 2 - 6 - B4B

Packaging 2 - 7 - B4B

Packaging 2 - 8 - B4B

Packaging 2 - 9 - B4B

Packaging 2 - 10 - B4B

Packaging 2 - 11 - B4B

Packaging 2 - 12 - B4B

Packaging 2 - 13 - B4B

Packaging 2 - 14 - B4B

Packaging 2 - 15 - B4B

Packaging 2 - 16 - B4B

Packaging 2 - 17 - B4B

Packaging 2 - 18 - B4B

Packaging 2 - 19 - B4B

Packaging 2 - 20 - B4B

Packaging 2 - 21 - B4B

Packaging 2 - 22 - B4B

Packaging 2 - 23 - B4B

Packaging 2 - 24 - B4B

Packaging 2 - 25 - B4B

Packaging 2 - 26 - B4B

Packaging 2 - 27 - B4B

Packaging 2 - 28 - B4B

Packaging 2 - 29 - B4B

Packaging 2 - 30 - B4B

Packaging 2 - 31 - B4B

Packaging 2 - 32 - B4B

Packaging 2 - 33 - B4B

Packaging 2 - 34 - B4B

Packaging 2 - 35 - B4B

Packaging 2 - 36 - B4B

DF FEB 20 2019

210 QC 6

10 pcs

3/8/19

0.00 0.00

QC 6 - 38

211 Small Fab - 2 - B4B	10 pcs	3/8/19	0.00 1.00	QC 6 - 42	
				QC 6 - 9	
				QC 6 - 68	DAS
				QC 6 - 61	FEB 20 2019 68
				Small Fab - 1 - B4B	9-89
				Small Fab - 2 - B4B	MCC
				Small Fab - 3 - B4B	
212 QC 5	10 pcs	3/8/19	0.00 0.00	Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 38	
				QC 5 - 42	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	888 19 02/20
220 Packaging 3-1 - Stock - B4B	10 pcs 12 pcs	3/8/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	DAS
				Packaging 3 - 6 - B4B	218
				Packaging 3 - 7 - B4B	9.50
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	MCC
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	

				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
230 QC 21 - SA	10 pcs	3/8/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	

Part Op 140 - SL-154 (MORI SL-154 LATHE) 1-1-Machine as per folio FB790 FOLIO REV: _____ DWG REV: _____
 Descriptions: 2-Deburr 3-Engrave T/N And / or S/N number as required Using Marktronic engraver as per DWG.

150 - (QC2- Inspect parts off machine FAI/FAIB)

160 - (QC8- Inspect parts - second check)

190 - Outsource4 (Outsource process-Anodize per QSI017 4.1.10.1) -Issue P/O: PO 042570 -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water sealant -Certificate of Conformity is required

200 - (Receive & Inspect for Damage & Mat'l Certs) Receive

210 - (QC6- All purchased or subcontracted products)

211 - (Small Fab) 1-Cut -11 to length as per DWG. 2-Cut -15 as required 3-Assemble quill (-1) as per DWG. 4-Pack as per DWG.

212 - (QC5- Inspect part completeness to step on W/O)

220 - (Identify as per dwg & Stock Location: _____) Identify and Stock

230 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M6061T6R1.000	Round Bar 1.00"	2.1900 ft (.219 ea)	140-SL-154 - 1	
2044T47	Tube Ø1.09	2.8000 ft (.28 ea)	211-Small Fab - 2 - B4B	5152113
2044T67	Cap Ø1.09	2420 Ea (2 ea)	211-Small Fab - 2 - B4B	5152045
91585A030	Dowel Pin	3630 Ea (3 ea)	211-Small Fab - 2 - B4B	-5151941
9263K519	O-ring	1210 Ea (1 ea)	211-Small Fab - 2 - B4B	71-5053240 5151942
PAD210	Foam Ø1 X 1	.8000 sf (.08 ea)	211-Small Fab - 2 - B4B	5021250

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
140-SL-154 - 1	M6061T6R1.000	2	45	0
211-Small Fab - 2 - B4B	2044T47	3	29	0
	2044T67	20	107	0
	91585A030	30	47	0
	9263K519	10	7	0
	PAD210	1	11	0

Part Specifications

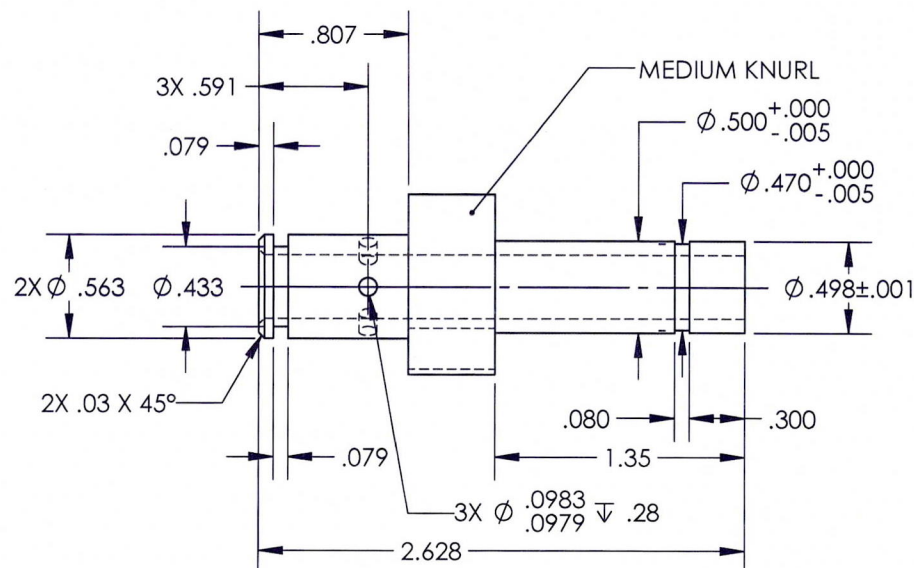
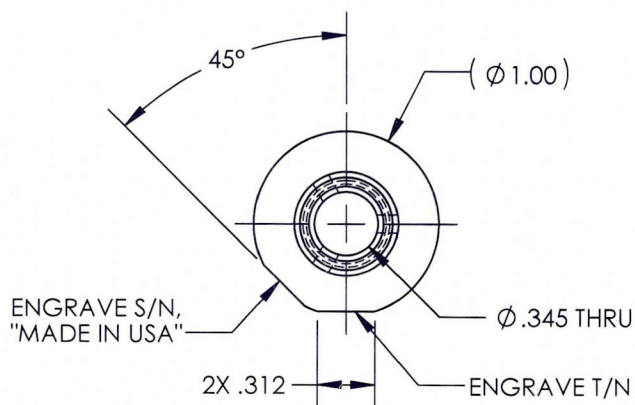
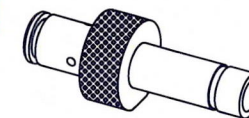
Specifications could not be found.

Plex 1/30/19 1:36 PM Dart.lajeunesse.marie

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		ADDED SECOND FLAT TO ENGRAVE S/N & "MADE IN USA", ADDED NOTE TO DETAIL	5/22/2009	RJC	
2		CH'D P/N -1 MATERIAL FROM STRESS PROOF & FINISH SPEC TO RED ANODIZE PER WP & DW, ADDED MIL SPEC PER WP.	10/29/2009	RJC	RW
3		MODIFIED -1 TO WORK WITH COUPLING	7/31/2012	JAG	
4	14-0209	-1 REMOVED .059 LIP FROM INPUT SIDE OF QUILL. CH'D DIM WAS Ø1.00 IS (Ø1.00). DELETED DIM 3X .591. ADDED DIM 3X .216.	11/5/2014	DPD	JAG

SEE ATTACHED DEVIATION



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 189805-1105
190130

(-1)

QUILL

DART AEROSPACE	
TITLE ENGINE & HYDRAULIC DRAIN TUBE	
DWG NO. RBE703A95-0520-01-1	REV 4
MAT'L 6061	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH RED ANODIZE
.X ± .1	SPEC MIL-A-8625F, TYPE II, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	EUROCOPTER AS350A
SCALE 1:1	DATE 11/10/2008
SHEET 2 OF 2	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only

Job: <u>189805</u>		DISPOSITION		DEPARTMENT/PROCESS							
Part No. <u>RBE703A95-0520-01 Rev. 4</u>		Rework ☐ Scrap ☐ Use-as-is ☐		Skid-tube ☐ Machining ☐ Large Fab ☐		Cross tube ☐ Small Fab ☐ Finishing ☐		Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐		Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐	
Date :		Sequence #:		QTY Affected :				MRB (QSI042) <i>M. Lee</i> Oct 30, 2018			
Description Work Order Deviation				Disposition				Completed By			
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)				Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). This deviation is acceptable. The fit, form and function of the part will be as originally intended.				Lead hand / Supervisor			
								QC / QA Coordinator			
Root Cause		FAULT CATEGORY									
Operator ☐		☐ Pressure/Forced		☐ Contamination		☐ Power Loss/Surge		☐ Positioned Wrong			
Manufacturing Process ☐		☐ Bending		☐ Misaligned/off center		☐ Folio/Program		☐ Outside Tolerance			
Equip/Tooling ☐		☐ Crushing		☐ BOM/Route		☐ Grain Direction		☐ Drawing			
Handling/Presservation ☐		☐ Cracks		☐ Broken/Damage/Defect		☐ Weld		☐ Finish			
Material ☐		☐ Crimp/Kink/Ripple/Wave/Twist		☐ Incomplete/Unclear Instructions		☐ Wrong Stock Pulled		☐ Part Lost/Missing			
Product Improvement ☒		☐ Marks/Chatter		☐ Drill Holes		☐ Out of Sequence		☐ Misread			
Process Improvement ☐		☐ Mislabeled		☐ Fit/Function		☐ Off-set/Set-up					
Human Factors ☐		Other/Details:									



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042570



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO042570
PO Date: 2/11/19
Due Date: 2/15/19
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments: ** Need for Feb.15, please confirm if ok **

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189027	RBT18632-1	Cup Outsource4 (Outsource process-Anodize per QSI017 4.1.10.1) -Issue P/O to GROUPE ALTECH PO: -- ANODIZE COLOR BLACK, PER IAW MIL-A-8625F TYPE 2 CLASS 2, Water sealant -Material type; - Certificate of Conformity is required	Firmed -	X10 DP	2/15/19	10 pcs	0 pcs	10 pcs	\$6.00/pcs	\$60.00
2	189028	RBT18632-11	Press Outsource4 (Outsource process-Anodize per QSI017 4.1.10.1) -Issue P/O to GROUPE ALTECH PO: -- ANODIZE COLOR BLACK, PER IAW MIL-A-8625F TYPE 2 CLASS 2, Water sealant -Material type; - Certificate of Conformity is required	Firmed -	X10 DP	2/15/19	10 pcs	0 pcs	10 pcs	\$6.00/pcs	\$60.00



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PURCHASE ORDER PO042570



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	189109	RB H4749-1	Drain Hose Body (Outsource process- Anodize per QSI017 4.1.10.1) -Issue P/O to Groupe Altech: PO -ANODIZE COLOR RED, PER IAW MIL-A- 8625 TYPE-2 CLASS- 2, Water sealant -Certificate of Conformity is required	Firmed - X17		2/15/19	17 pcs	0 pcs	17 pcs	\$3.2432432/pcs	\$55.14
4	189211	RBT18660-1	Quill Outsource process- Anodize per QSI017 4.1.10.1) - -Issue P/O to ATG : PO -ANODIZE COLOR RED, PER IAW MIL-A- 8625 TYPE-2 CLASS- 2, Water sealant -Certificate of Conformity is required	Firmed - X8		2/15/19	8 pcs	0 pcs	8 pcs	\$3.2432432/pcs	\$25.95
5	189805	RBE703A95- 0520-01-1	Quill Outsource4 (Outsource process-Anodize per QSI017 4.1.10.1) - Issue P/O: PO -ANODIZE COLOR RED, PER IAW MIL-A- 8625 TYPE-2 CLASS- 2, Water sealant -Certificate of Conformity is required	Firmed - X12		2/15/19	12 pcs	0 pcs	12 pcs	\$3.2432432/pcs	\$38.92
Grand Total:											\$240.00



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PURCHASE ORDER

PO042570



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 2/12/19 9:16 AM dart.isimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(016765-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

016765 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
18-Feb-2019		Aman				PO042570			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Quantités / Quantities					
				Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order	
1	RBT18632-1 Rev.	RBT18632-1 01-ANO-BLACK [ANODIZE BLACK] MIL-A-8625F TYPE 2 CLASS 2	ANODIZE CH	10	10	0	0	0	
2	RBT18632-11 Rev.	RBT18632-11 01-ANO-BLACK [ANODIZE BLACK] MIL-A-8625F TYPE 2 CLASS 2	ANODIZE CH	10	10	0	0	0	
3	RB H4749-1 Rev.	RB H4749-1 01-ANO-RED [ANODIZE RED] IAW MIL-A-8625 TYPE 2 CLASS 2 WATER SEALANT	ANODIZE CH	17	17	0	0	0	
4	RBT18660-1 Rev.	RBT18660-1 01-ANO-RED [ANODIZE RED] IAW MIL-A-8625 TYPE 2 CLASS 2 WATER SEALANT	ANODIZE CH	8	8	0	0	0	
5	RBE703A95-0520-01-1 Rev.	RBE703A95-0520-01-1 01-ANO-RED [ANODIZE RED] ANODIZE COLOR RED PER IAW MIL-A-8625 TYPE 2 CLASS 2 WATER SEALANT	ANODIZE CH	12	12	0	0	0	

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.